

CORRES. CONTROL
OUTGOING LTR NO.

JOE ORDER #

02-RF02418



November 4, 2002

02-RF-02418

DIST.	LTR	ENC
RAILSFORD, M.D.		
ERRERA, D.W.		
ERRI, M.S.		
ULTON, J.C.		
MACOMINI, J.		
ALL, L.		
MARTINEZ, L.A.		
ARKER, A.M.		
OWERS, K.		
COTT, G.K.		
HELTON, D.C.	X	
FEARS, M.S.		
RICE, K.D.		
UOR, N.R.		
COORHEIS, G.M.		
ASTA, S.	X	X
Deck, C.	X	X
Indy, T.	X	X
Pitney, M.	X	X
Garren, R.	X	X
Nininger, B.	X	X
Haines, P.	X	X
Butterfield, M.	X	X
North, J.	X	X
AQM	X	X
JOE CONTROL	X	X
DMN RECORD	X	X
WASTE REC. CTR.	X	X
BAFFIC		
ATS/130		
CLASSIFICATION:		
ICM		
INCLASSIFIED		
CONFIDENTIAL		
SECRET		

Mr. Arch Crouse
Colorado Department of Public Health and Environment
Air Pollution Control Division, SSP-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530

AIR POLLUTANT EMISSION NOTICE FOR THE SOLAR PONDS CLOSURE PROJECT AT THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE (SITE) - AJR-046-02

Attached, please find an Air Pollutant Emission Notice (APEN), a check for the associated APEN fees, and supporting technical documentation for the Solar Ponds Closure Project. An APEN is being submitted to quantify particulate emissions from the project during soil disturbance activities.

The solar ponds were operated primarily to store and evaporate radioactive process wastes and neutralized acidic process wastes containing low concentrations of radionuclides. The closure of the solar ponds will involve removing any standing water within the ponds, pushing the berms into the ponds, adding clean fill to create a level area, and grading and vegetating the area.

Also attached, please find a dust control plan for the project, as requested by the state.

If you have any questions concerning this correspondence or the attached information, please contact me at (303) 966-3687 or Rob Garren at (303) 966-2609, digital page (303) 212-1653.

Andrew Rosenman
Environmental Systems and Stewardship

RMG:se

cc.

W. Prymak (DOE, RFFO)

Attachments: As Stated

AUTHORIZED CLASSIFIER
SIGNATURE
EXEMPT FROM CLASS
ER CEX-105-01

late

REPLY TO RFP CC
IO:

ACTION ITEM STATUS

PARTIAL/OPEN

CLOSED

TR APPROVALS:

RIG & TYPIST INITIALS

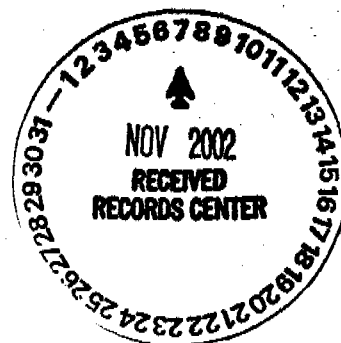
RMG/PL

1/7

ser Hill Company, L.L.C.

ky Flats Environmental Technology Site, 10808 Hwy. 93 Unit B, Golden CO 80403-8200 • 303-966-7000

ADMIN RECORD
1101-A-000285





November 4, 2002

02-RF-02418

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Colorado Department of Public Health and Environment
Air Pollution Control Division, SSP-B1
4300 Cherry Creek Drive South
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Attachments: As Stated

AIR POLLUTANT EMISSION NOTICE

FIRM NAME U.S. Department of Energy, Rocky Flats Environmental Technology Site, and Kaiser-Hill Company, L.L.C. AIRS ID PERMIT NO.
 MAIL ADDRESS 10808 Highway 93, Unit B, Golden, Colorado 804032-8200 PLANT LOCATION Section 2, Range 70W, Township 25 COUNTY Jefferson
 PERSON TO CONTACT REGARDING THIS INFORMATION Andrew J. Rosenman TITLE Program Manager, Air Permitting, Kaiser-Hill, L.L.C. PHONE (303) 966-3687

GENERAL DESCRIPTION OF THIS PLANT'S FUNCTION Environmental Restoration and Waste Management FEDERAL TAX ID NO. 84-1296851

A. GENERAL INFORMATION

Normal Operation of Plant		Process Seasonal Throughput (% of Annual)					ADDITIONAL INFORMATION OR REMARKS:	
No. of Employees	Land Area	Hours/Day	Hours/Year	Days/Week	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov
2,570	6,521.9 acres	24	8,760	7	25	25	25	25

N/A = Not Applicable

B. STACK OR VENT INFORMATION (Identify below which stack if plant has two or more; refer to attached sketch of plant layout)

Height	Diameter	N/A	ft	Temperature	N/A	°F	Flow Rate	N/A	ACFM	Velocity	N/A	ft/min	Moisture	N/A	%	Plant ID No. for Stack	Solar Pond Closure (soil disturbance activities)											

C. FUEL INFORMATION

Description of Combustion Unit	N/A	Design Rate (10 ⁶ BTU/HR)	Kind of Fuel Burned	Annual Fuel Consumption		Fuel Heating Value:		Per Cent by Weight	Seasonal Fuel Use (% of Annual Use)												Space Hg (% Ann.)			
				Requested level	Data year level	(BTU/lb, BTU/gal, or BTU/SCF)	Sulfur		Ash	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov											
Make/Model:																								
Serial No.:																								

D. PROCESS INFORMATION

Description of Processing Unit	N/A	Raw Materials Used		Raw Materials-Annual Consumption		Design Rate (Specify Units/Hour)	Finished Product Description	Finished Product-Annual Output	
		Description	Requested level	Data year level				Data year level	
Make/Model:									
Serial No.:									

E. POLLUTION CONTROL EQUIPMENT

Pollutant	Type of Control Equipment		Overall Collection Efficiency	ESTIMATED EMISSIONS (DATA YEAR)	ESTIMATION METHOD	CHECK ALL BOXES THAT APPLY
	Primary	Secondary				
Particulate	N/A	N/A	N/A	N/A	AP-42	<input checked="" type="checkbox"/> New or previously unreported source* <input type="checkbox"/> Modification of existing permit†† <input type="checkbox"/> Change in emissions, throughputs or equipment‡ <input type="checkbox"/> Transfer of ownership (List previous owner in REMARKS section of box A.)‡ <input type="checkbox"/> Relocation of Source‡ <input type="checkbox"/> Previous APEN is expiring‡ <input type="checkbox"/> Mandatory update or deferred reporting‡ <input type="checkbox"/> Request for Emission Reduction Credit†† * Complete all applicable portions of APEN † Complete shaded areas ('Requested' values) ‡ Complete all information above box A, and those remaining portions which reflect changes
PM ₁₀	N/A	N/A	N/A	N/A	AP-42	
SO _x						
NO _x						
VOC						
CO						

PLEASE USE APEN HAP ADDENDUM FORM TO REPORT HAZARDOUS AIR POLLUTANT EMISSIONS OR OTHER POLLUTANTS NOT LISTED ABOVE.

☐ CHECK HERE IF YOU WISH THE DIVISION TO CALCULATE YOUR EMISSIONS. SEE "EMISSION ESTIMATES" INSTRUCTIONS ON BACK.

Signature of Person Legally Authorized to Supply Data: Karan North, Manager, Environmental Systems & Stewardship, Kaiser-Hill, L.L.C. 11/4/02
 Signature of Person Legally Authorized to Supply Data: William J. Prymak, DOE, RFFO 11/4/02
 Year for which the actual data applies: 2002
 Date source began or will begin operation: November 2002

THIS NOTICE IS VALID FOR FIVE YEARS. A revised notice shall be filed prior to this expiration date, whenever a permit limitation must be modified, whenever control equipment is changed, and annually whenever a significant emission change occurs. For specific details see Regulation 3, Part A, § II.C.1.

Mail to: CDPHE, APCD
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

APEN # 1 OF 1
 AIRS ID (APCD USE)

**Kaiser-Hill Environmental Systems and Stewardship
Rocky Flats Environmental Technology Site**

**Solar Ponds Closure Project
APEN Submittal Report**

November 4, 2002

Introduction

This report provides supporting information to the Colorado Department of Public Health and Environment, Air Pollution Control Division (CDPHE, APCD) for submittal of an Air Pollutant Emission Notice (APEN) form quantifying particulate emissions from the closure of solar evaporation ponds at the Rocky Flats Environmental Technology Site.

This information and the associated APEN are being transmitted to the CDPHE, APCD to meet the requirements of Colorado Air Quality Control Commission Regulation No. 3. The reportable criteria pollutants are particulates (both particulate matter less than 10 micrometers in diameter [PM10] and total particulate matter [PM]).

Background

Operations at the Site resulted in the generation of process wastewater containing radioactive and hazardous waste constituents that were managed in various waste-processing units. The solar ponds, located in the northeastern portion of the former protected area boundary, were used to process wastewater from 1953 to 1986. The solar ponds consist of five existing surface impoundments designated as 207-A, 207-B North, 207-B Center, 207-B South, and 207-C.

The solar ponds were operated primarily to store and evaporate radioactive process wastes and neutralized acidic process wastes containing primarily low concentrations of radionuclides. A complete operational history of pond activities and remedial efforts is contained in the *Draft RCRA Closure of the RFETS Solar Evaporation Ponds Proposed Action Memorandum*, dated August 28, 2002, currently out for public review and comment.

Project Description

Closure of the ponds will involve removing any standing water within the ponds, pushing the berms into the ponds, adding clean fill to create a level area, and grading and vegetating the area. The Site plans to use 39,000 cubic yards of clean soil from adjacent areas to supplement the berm soil during contouring activities. Grading will be performed to conform to the topography of the surrounding area and to provide adequate site drainage. The area will be vegetated with native grass species.

APEN Submittal Information

An APEN form is provided with this report. Reportable particulate emissions will be generated during soil disturbance activities. Radionuclide emissions were quantified and were below any reporting or monitoring threshold. Per the Rocky Flats Cleanup Agreement, a construction permit is not required for this type of activity.

Emissions

Particulate air pollutant emissions were calculated for various soil disturbance activities utilizing emission factors from the "Compilation of Air Pollutant Emission Factors," EPA, AP-42. The reported emissions listed below are uncontrolled. No credit was taken for control methodologies (watering, dust suppression techniques, etc.).

The following table provides a summary of particulate emissions from remediation activities:

Emissions Summary Table:

	<u>Particulate Emissions</u> (Tons per year)	<u>PM-10 Emissions</u> (Tons per year)
Unpaved Road Emissions (AP-42, 13.2.2, 9/98 file via Internet with dust control constants from Actinide Study)	3.87E+00	4.57E-01
Soil Handling w/ Front end Loader (AP-42, 13.2.4, unloading clean fill)	3.29E-02	1.56E-02
Graders/Scrapers for Pond Area (AP-42, Section 11.9, Table 11.9-4, scraper emission factor for top soil)	1.79E+00	4.64E-01
Excavation with Backhoe of Clean Fill (AP-42, Section 11.9, Table 11.9-2)	1.21E-01	4.75E-02
Bulldozer for Moving Soil (AP-42, Table 11.9.2)	4.16E-01	8.11E-02
<u>Total Emissions:</u>	<u>6.23E+00</u>	<u>1.07E+00</u>

- LAND DEVELOPMENT -

FUGITIVE DUST CONTROL PLAN FOR LAND DEVELOPMENT

(This must be submitted with the Air Pollutant Emission Notice-and-Application for Emission Permit)

Regulation No. 1 requires that a fugitive dust control plan be submitted by applicants whose source / activity results in fugitive dust emissions. The control plan must enable the source to minimize emissions of fugitive dust to a level that is technologically feasible and economically reasonable. If the control plan is not adequate in minimizing emissions a revised control plan may be required. The control plan (if acceptable to the Division) will be used for enforcement purposes on the sources.

Please check the dust control measures which you propose for your activity. The Division will enforce the control measures checked. Use separate sheets if more space is needed. Also note items with an asterisk (*). This indicates those measures which will probably be required.

I. Control of Unpaved Roads on Site

- ☒ Watering
 - ☐ Frequent (Watering Frequency of 2 or More Times Per Day)
 - ☒ As Needed
- ☐ Application of Chemical Stabilizer
- ☒ Vehicle Speed Control
 - Speeds limited to 25 mph maximum. Speed limit signs must be posted.
(Generally 30 mph is maximum approvable speed on site.)
- ☐ Graveling

II. Control of Disturbed Surface Areas on Site

- ☒ Watering
 - ☐ Frequent (Watering Frequency of 2 or More Times Per Day)
 - ☒ As Needed
- ☐ Application of Chemical Stabilizer
- ☐ Vehicle Speed Control
 - Speeds Limited To _____ MPH Maximum. Speed Limit Signs Must Be Posted.
- ☒ Revegetation Revegetation Must Occur Within One Year Of Soil Disturbance
 - ☒ Seeding with mulch
 - ☐ Seeding without mulch
- ☐ Furrows at right angle to prevailing wind
 - Depth of furrows _____ Inches (must be greater than 6")
- ☐ Compaction Of Disturbed Soil On A Daily Basis To Within 90 % Of Maximum Compaction
(As determined by a Proctor Test).
 - ☐ Foundation areas only; or
 - ☐ All disturbed soil.
- ☐ Wind Breaks
 - Type: _____ (Example: Snow Fence, Silt Fence, etc.)
- ☐ Synthetic Or Natural Cover For Steep Slopes.
 - Type: _____ (Netting, Mulching, etc.)

- LAND DEVELOPMENT -

III. Prevention Of Mud And Dirt Carried Out Onto Paved Surfaces.

- ☒ Prevention
- ☐ Gravel Entry Ways
- ☐ Washing Vehicle Wheels
- ☐ Other: TRAFFIC WILL REMAIN ON ESTABLISH TEMPORARY ROADS
- ☐ Cleanup of Paved Areas Frequency: _____ Times Per Day
- ☐ Street Sweeper
- ☐ Hose With Water
- ☐ Other: _____

Additional Sources of Emissions

List any other sources of emissions or control methods

AREA'S WHERE SCRAPERS WILL REMOVE SOIL WILL BE PRE-WATERED PRIOR TO REMOVAL. THERE WILL BE AT LEAST ONE DEDICATED 4000 GAL WATER TRUCK WITH SPRAYERS TO WET HAUL ROAD AND CUT AREA. SHUT DOWN OPERATIONS WHEN WIND SPEEDS ARE SUSTAINED ABOVE 30 MPH.

Thomas M. Lindsay
Signature of a Responsible Official (not a vendor or consultant)

10/30/02
Date

Thomas M. Lindsay
Name (please print)

Project Field Manager
Title
Solar Ponds

Check the appropriate box if you want:

- ☐ Copy of the Preliminary Analysis conducted by the Division
- ☐ To review a draft of the permit prior to issuance

(Checking any of these boxes may result in an increased fee and/or processing time)

Send this form along with \$119.96 to:
Telephone: (303) 692-3150

Colorado Department of Public Health and Environment
Air Pollution Control Division
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Small Business Assistance Program
(303) 692-3148

Small Business Ombudsman
(303) 692-2135